

IN THE SENATE OF THE UNITED STATES.

JUNE 14, 1860.—Ordered to be printed.

Mr. HARLAN made the following

REPORT.

[To accompany Joint Resolution S. 44.]

*The Committee on Public Lands, to whom was referred the "joint resolution of the legislature of California, asking Congress to cede and donate a tract of land known as the 'Colorado Desert' to that State, for certain purposes therein set forth," having had the same under consideration, submit the following report:*

The aforesaid joint resolution passed the California legislature April 12, 1859, (*vide* the laws of California, hereto annexed, marked exhibit A,) and instructs the senators and requests the representatives in Congress from California to procure the passage of a law, by which the United States government shall cede and donate to California the following described tract of land, bounded as follows, viz: Beginning at the initial point of the San Bernardino base line, as established by the general survey, (that already made by the general government;) from thence running east on the said line to the Colorado river; thence down said river to its junction with the southern State line; thence west along said line to the eastern base of the main range of the mountains; thence northerly along the base of said range of mountains to the place of beginning, (see map of California, marked exhibit B.)

This proposed grant is to include all the domain within the aforesaid boundaries, except so much as the general government may want to reserve for the military posts now established on the Colorado river at the junction of the Gila.

The reasons assigned by the aforesaid joint resolution for asking a donation of this tract of the public domain, are that the cession thereof will enure to the mutual benefit of the general government and California, as the entire tract known as the "*Colorado Desert*" is a desert waste, devoid of water and vegetation; owing to which it presents a great obstacle to travel and transportation between the Atlantic and Pacific; that a portion of it is lower than the Colorado river; that it is barren and sterile for the want of water, but is subject to overflow from the Colorado; that, in the event of a cession thereof by Congress, the State of California proposes to establish a series of hydraulics, and

a proper system of canals, through this desert, to be filled by water from the Colorado; that the only practicable mail route across this desert is a deflection from a straight line, which causes a trespass upon Mexican territory; and, finally, as a portion of this desert is subject to overflow, it might be claimed by the State of California under existing laws as swamp and overflowed lands.

In support of the foregoing reasons, much testimony is adduced before the committee, the most important of which is contained in various statements; some of which are made under oath by gentlemen who are now, and others who have been, engaged in public service under the general government, upon the aforesaid desert, and conversant by personal observation with all the facts relative thereto.

Captain H. S. Burton, of the United States army, states, under oath, as follows:

"In answer to the requirement contained in your note of the 19th instant, I have the honor to submit the following statement respecting the Colorado desert of California. I presume that I am not required to make a minute report upon the geography of this formidable desert, as full and accurate reports upon it have been made by several scientific and capable officers of the army, and are now on file among the archives of the War Department; I confine the present statement, therefore, to that portion of desert contained between the San Bernardino base line (government survey) and the Mexican boundary line.

"This portion of California, with the exception of the narrow bottom lands on the west bank of the Colorado river, and the small patches of grass around the few water holes and springs of water, found in the vicinity of the San Geronio Pass, I consider an immense waste of uninhabitable country, incapable of cultivation, without vegetation, except occasional bunches of the creosote plant, and near the California mountains of the artemisia. From about the 1st of April to October subject to the most intense heat, the atmosphere dry and scorching, like the hot air from a furnace.

"From November to March subject to quite severe cold. At this season the winds from the Coast range of mountains, in California, sweep across the plains to the Gulf of California with the greatest violence, raising the fine sand of the desert in immense clouds, filling the atmosphere and concealing the land marks, almost obscuring the light from the sun, obliterating almost all trace of the roads across the country, and forcing the traveler to stop immediately, and await, in the best manner he can, until the gale ceases. Many a time I have been overtaken by these 'sand storms' while crossing this desert, and obliged to stop, roll myself up in a blanket, and, holding my mule by her picket rope, lie down upon the sand, without shelter, and wait until the storm was over.

"Near the Mexican boundary line and south of it, the mezquite and other vegetation is found, and the soil of a portion of the desert lying in Lower California seems to be capable of some cultivation. The great scarcity of water, however, will be an obstacle to its cultivation very difficult to overcome. The Southern Overland Mail Company, in seeking for water, is obliged to travel some eighty miles in Mexi-

can territory. After leaving Vallecitos, where the road from Los Angeles debouches from the California mountains, the route traveled by this company passes over about sixty miles in our territory, until it reaches the Indian wells. There it crosses into Lower California, and continues in Mexican territory until it reaches the Colorado river, at Pilot Knob, about eight miles west of Fort Yuma; there it returns to our territory.

"During the time I was stationed at Fort Yuma, from April, 1857, to May, 1859, I crossed this desert in every season of the year, and in various directions, ten times, and am personally cognizant of the futile efforts of emigrants and of the mail company to find water by digging wells, or in other manner, at their command, to the north of the boundary line, so as to avoid this crossing into foreign territory.

"The proposed route for the southern overland mail, from Los Angeles, *via* San Bernardino and the San Gorgonio Pass, arrives at the Colorado river about six miles west of Fort Yuma. This route is entirely within our own territory, and much shorter than the one now traveled; but for about eighty miles before reaching the Colorado it has been found to be impossible to get water by any of the ordinary means in use. The citizens of San Bernardino county have spent above \$4,000 in vain endeavors to dig wells in this stretch of road. In some cases, the wells have been sunk to the depth of 120 feet, and no sign of water found. While I was in command at Fort Yuma, two well-organized parties, at different times, were sent out for the purpose of thoroughly testing the possibility of finding water within this eighty miles; but they were obliged to return without success, after two weeks' hard labor and some suffering from want of water.

"The greater portion of this desert is, in my opinion, a most miserable, uninhabitable country—a barrier to all civilization, until some means can be devised by which it can be furnished with water. The country at the outlet of the San Gorgonio Pass, and for a short distance to the north and south, near the foot of the California Coast range of mountains, where a few springs and a tolerably large pond of water is found, is inhabited by the Ca-hui-ua tribe of Indians. The Indians think of this desert with terror. They believe that the souls of the bad Indians are condemned to wander over this desert forever, in the summer without water, and in the winter without clothing; and from my own experience upon it, I can well understand why they consider it the abode of the wicked after death."

Major Emory, of the United States army, says:

WASHINGTON, *March 24, 1860.*

DEAR SIR: In reply to your note, received this morning, asking me to furnish you a statement in writing, "showing the physical geography of that portion of country between the eastern base of the main range of mountains on the Pacific coast and the junction of the Gila and Colorado rivers," &c., I beg to refer you to my several reports on the subject, viz: Notes of Military Reconnoissance, Senate Ex. Doc. No. 7, Thirtieth Congress, first session, pp. 100 to 103, and Mexican Boundary Report, Ex. Doc. 108, Thirty-fourth Congress, first session,

part II., vol. 1, pp. 87, 88, and from p. 92 to p. 97, p. 4, vol. 1, and also to the manuscript maps of the boundary over that desert, deposited in the Department of the Interior.

The desert character of that country, the obstacles it presents to the transportation of government supplies and to immigration, are undoubted. These obstacles, unless removed, must in the end force all travel to take the circuitous sea route. That they will ever be removed, under our present mode of disposing of the public lands, is impossible. No single owner of a section of land, or of any ten consecutive sections of land, could, with the least prospect of success, attempt the cultivation of any part of the desert. To open any portion to settlement would require a large capital, and the absolute proprietorship of the right of way of the aqueduct from the source of water to the point to be irrigated, and that would cover a very considerable space.

I think all this will appear from the physical geography of the country, as illustrated in the reports above referred to.

The importance to California of having this oasis established, is very great. Otherwise, all the immense mineral wealth of the Arizona and Gila districts now developing must, instead of going out through some California port, seek the more distant port of Guaymas, in a foreign territory. It is also very important to the general government; for it is over this desert government stores are transported; and the overland mail has not been able to find a practicable *winter* route.

Very respectfully, your obedient servant,

W. H. EMORY.

O. M. WOZENCRAFT, Esq.

R. C. Matthewson, Esq., government surveyor in California, says:

SAN FRANCISCO, *April 4*, 1859.

DEAR SIR: In regard to the information you desire respecting that portion of the Colorado desert embraced between the San Bernardino base line and the Mexican boundary line from north to south, and from the Colorado river to the base of the main range of mountains from east to west, I have to state, that I am familiar with the greatest portion of it, having spent nearly two years in surveying the public lands there.

The whole tract embraced within the specified boundaries may very properly be termed a desert, inasmuch as it is all, with the rare exceptions of a very few spots, utterly destitute of any kind of vegetation, notwithstanding the soil in many portions of it is of the very best quality, being composed of alluvial earths, marl, and shells, which, if it could be irrigated, would, undoubtedly, prove very fertile and productive. After showers of rain, which fall very seldom on the desert, and cover but small patches here and there when they do fall, I have known the "careless" weed to grow as high as ten or twelve feet in a few weeks.

The bed of the Great Salt Lake, situated about sixty miles south of the San Bernardino base line, about sixty miles west of the Colorado river, thirty miles north of the Mexican boundary line, and twenty miles east of the base of the mountains, is unquestionably lower than

the bed of the Colorado river, the water flows into it from every point of the compass, and it bears incontrovertible evidence of having once been a portion of the Gulf of California, or the bed of a great inland sea. The old sea beach can be distinctly traced, and marine fossil remains are abundant.

I am of opinion that an aqueduct could be constructed by which the water of the Colorado river might be conveyed to the great basin of this Salt Lake, whence a great portion of the surrounding country might be irrigated, but the enterprise would require a vast outlay of capital before the country could be reclaimed. I am of opinion, however, that the ultimate advantage resulting from the successful consummation of the undertaking would justify the outlay of capital, but of this capitalists must of course judge for themselves.

The temperature of the desert, especially during the summer months, is very high, ranging from  $120^{\circ}$  to  $130^{\circ}$  Fahrenheit in the shade, and the sand storms are sometimes so violent that mountains of sand are, sometimes during one continued storm, removed completely from one locality to another. There can be no doubt, however, with irrigation, and the consequent *verdure*, the climate would be greatly modified and adapted to a dense population. At the Coyote valley, where there is an Indian rancheria, near the eastern base of the mountains, grapes, watermelons, &c., are ripe six weeks in advance of those at San Diego and Los Angeles.

This section of country is of no *earthly* use in its present condition; and I think any company who would reclaim it for getting a fee-simple title to it would be conferring a blessing not only upon the people of California and the United States generally, but upon "the rest of mankind," and especially *those who have to travel across the Colorado desert.*"

I am, very respectfully, yours, &c.,

R. C. MATTHEWSON.

Dr. O. M. WOZENCRAFT.

A. B. Gray, Esq., commissioner to run the boundary line between the United States and Mexico, says:

WASHINGTON, *April* 11, 1860.

DEAR SIR: In reply to your request to give my views in regard to the district of country lying between the Colorado river and San Diego range of mountains, of California, I would state that my knowledge of it personally is confined to the part from Fort Yuma to Carriso creek, some ninety-odd miles, by way of the present emigrant or wagon road.

This section I have been over some four times. It is called the Jornada, or Desert, and except in one or two places, where wells exist, no water is seen, no timber, but stunted mezquite in places, and the ground generally dry, sandy, with the appearance of a vast waste.

As it now stands, this desert is unavailable for productive purposes; but your plan, if I comprehend it rightly, will, if practicable, I believe, conduce to the public good, and be of great benefit to the United States



government, to California, and to the trade and travel generally of that part of our continent.

I remain, respectfully, yours,

A. B. GRAY.

Dr. O. M. WOZENCRAFT,  
*Of California, &c.*

A. D. Campbell, Esq., says, under oath:

WASHINGTON, D. C., *April 6, 1860.*

MY DEAR SIR: In reply to your communication of this date, requesting my opinion upon the physical geography of the Colorado desert, the character of the lands there, and the best disposition of these lands, I have to state, that I regard the whole country east of California to the Colorado river, from 36° north to the Mexican line, essentially a desert. A large portion of it, particularly about the thirty-fifth parallel, is sandy, waterless, and woodless. Except on the Mohave river, at one or two spots, I do not believe there exists a compact township capable of supporting 200 people and their necessary stock. As a general thing, the soil is intrinsically good, but requires water. The only portion of the above region which can be extensively irrigated is the Colorado desert. I should not like to venture an opinion as to the disposition to be made of these lands by the United States, but I should be loth to accept this whole region as a gift with an obligation to reclaim it.

I am yours, &c.,

ALBERT D. CAMPBELL.

O. M. WOZENCRAFT, M. D., *Present.*

Sworn to and subscribed before me.

JOHN H. JOHNSON, *J. P.* [SEAL.]

John Rains, Esq., says, under oath:

WASHINGTON, D. C., *April 14, 1860.*

SIR: In answer to your interrogatories relative to the Colorado desert, "Whether or no any portion from the San Bernardino mountains to the eastern and southern boundary line can be occupied or sold for any consideration, and such other information as you may possess in relation to that region of country," I would state, that I have crossed and recrossed the above described section of country some fifteen times, and have explored it in all parts where it was possible to go, consequently may claim to have a peculiar knowledge of it, and, from that knowledge, am free to say, that there is no portion of it, with the exception of the location of the Indian rancheria, at the opening of the San Gorgonio pass, on which man or animal could subsist, or any portion of it that could be sold for any consideration, as there is neither water or vegetation, and the excessive heat and drifting sands make it extremely difficult to cross over it, owing to which there has been great suffering, loss of life and property.

It would be difficult to estimate the amount of property and stock

lost on this desert of death, (as called by the Mexicans.) I lost myself at one time some thirty thousand dollars' worth of sheep, that I had driven thus far from New Mexico.

I consider the entire section (named by you) not only valueless, but a great barrier to the prosperity of the State of California and to the general government; and if water could be introduced on it, (which would appear difficult, from the repeated failures in digging wells,) it would be a blessing to mankind, as there are portions of it that would be fertile were that element introduced.

I witnessed, in 1849, (after the overflow of New river,) a luxuriant growth of grass, and other vegetation, along and adjacent to the course taken by the water.

Yours, respectfully,

JOHN RAINS.

O. M. WOZENCRAFT.

Subscribed and sworn before me, the subscriber, a justice of the peace in and for the county of Washington, District of Columbia.

JOHN D. CLARK, *J. P.*

W. W. McCoy, Esq., late major in the United States army, says:

At the request of Dr. O. M. Wozencraft, of California, I take great pleasure in stating what I recollect in reference to the desert situated in the southern part of California.

I crossed and recrossed it, I think, in June, 1854, from Carriso creek to Fort Yumas, traveling each way by the same road. The weather was intensely hot, so hot as to render it necessary to travel altogether by night, for the comfort of ourselves and animals. I found water at remote distances, and then only in wells containing a very scanty supply for those who accompanied me and our animals. Indeed, in several places, it required those in charge of the animals to be constantly busy raising the water as it accumulated, to furnish a sufficient supply to enable them to make the trip.

My impressions relative to the country are less distinct, having traveled during the night. My recollection, however, is, that a portion (the greater portion) of it is an immense plain, covered with shifting sand, with here and there dwarf shrubs peculiar to the arid plains of that region.

The other portion is a rich alluvium, with mesquite growing along the indentations made by the receding of the waters of the Colorado, when that stream, during great freshets, forces it back over the alluvial districts. The entire country, in its present condition, is totally valueless, owing to its excessive dryness, for I am informed it rarely rains in that region.

The heat is intense beyond anything I have ever felt in any tropical region through which I have traveled.

My opinion is, that the interest of the United States and the interest of the State of California would be greatly promoted if the entire country (so far as I could observe) was donated to any person or persons who could supply water for stock traveling over it, and also

water in sufficient quantities for irrigating the alluvial portions by drawing it from the Colorado above. Indeed, it is questionable whether a bonus might not be given to any one who would obligate himself to supply water for irrigation and stock, promoting thereby the interest of the country, rendering valuable that which, under other circumstances, must always remain valueless.

I was informed, during my stay at the Colorado, by those who have resided there long, that immense losses have been sustained by those driving stock across the desert for want of water; and a young man who accompanied me across the desert, by the name of McCoy, afterwards joined a surveying party, wandered off from camp, became bewildered, it is supposed, and perished no doubt for want of water. He was never heard from afterwards.

W. W. McCOY,  
*Of San José, California.*

DISTRICT OF COLUMBIA, *County of Washington, to wit:*

Subscribed and sworn to before me, this 23d day of March, 1860.

THOMAS C. DONN,  
*Justice of the Peace for Washington county, D. C.*

E. F. Beale, Esq., superintendent of wagon road, says:

WASHINGTON, *April 5, 1860.*

SIR: In reply to your letter requesting me to state what I thought of the value of the lands on the great desert, lying between the settlements of California and the Colorado river, I have to reply that it is utterly barren of vegetation, and a great barrier to emigration on the southern road for want of water.

As to the money value of the land, it has none, in my opinion, there being only a few wells of brackish water on the whole road from the Carriso to the Colorado, a distance of nearly a hundred miles.

Respectfully, &c.,

E. F. BEALE.

Dr. O. M. WOZENCRAFT.

Sworn to and subscribed before me, this 5th day of April, 1860.

GILBERT L. GIBERSON, *J. P.*

Captain E. W. Stone, late of the United States army, says:

WASHINGTON, D. C., *March 30, 1860.*

SIR: I have your note of the 21st instant, asking me to give you a "statement in writing in reference to the physical geography of the Colorado desert, and your [my] opinion as to what the general government *can do with it*; that is, whether or no any portion of it could be sold for the expense of a survey of it."

I visited the region alluded to during the year 1852 while on official duty at Fort Yuma, and since that time (in 1857) have sent an exploring party through it, in connection with the survey of Sonora and Lower California.



The principal features of the country are volcanic rock, drifting sand, and good soil baked by continual drought into perfect barrenness.

I can see no use to which the United States government can put these lands, without first at her own expense constructing costly means of irrigation from the river Colorado.

In my opinion, the lands could not be sold to individuals for any sum nearly approaching the cost of a regular survey of them.

The soil in many places, as above stated, is good, but utterly worthless for the want of water.

Very respectfully, sir, your most obedient servant,

E. W. STONE,

*Late Captain United States Army.*

Dr. O. M. WOZENCRAFT, *Present.*

Colonel J. J. Abert, chief topographical engineers, in reply to the Secretary of War, says:

BUREAU OF TOPOGRAPHICAL ENGINEERS,

*Washington, May 17, 1860.*

SIR: I have the honor to acknowledge the reference to this bureau of the letter of the Hon. W. S. Latham, of the 11th instant, with your direction, to report "whether the Colorado desert, from the many surveys, &c., of army officers, is not looked upon as a serious barrier to the government service?"

The country embraced between the one hundredth meridian and the Coast range of mountains of the Pacific, between the thirty-second and forty-ninth degree of latitude, may be pronounced to be a desert, with occasional valleys, susceptible of cultivation.

The Colorado desert, however, has been regarded as one of the most serious obstacles to the overland journey.

Major Emory, in his report of the reconnoissance of 1846 and 1847, represents the journey across it as one of extreme hardship.

In case the reports of the officers who made surveys of this desert should not be easy for reference, I append herewith some extracts therefrom.

Lieutenant Williamson, topographical engineers, reports "the distance from Carriso creek to the Algodones, the first point where the road strikes the Colorado river, is eighty and a half miles. \* \* \* The main difficulty is the barren nature of the country and want of water. It is believed that the latter may be obtained in any desired quantity by digging. Not an inconsiderable portion of this divide is below the level of the Colorado river. In 1849 this river broke through its banks and the water flowed inland for some two hundred miles, forming what is known as New river. In many places it formed lagoons, while in others it confined itself to a narrow channel. The water in the connecting channels having dried up, the lagoons still remain, and are of great benefit to the emigrants. \* \* \* Carriso creek is dry, except at occasional points where the water is forced to the surface by rocks. There is a constant supply of water where it emerges from the hill to lose itself in the desert."

Dr. Blake, geologist, &c., to Lieutenant Williamson's party, reports as follows:

*"Extent and boundaries of the desert."*

"The Colorado desert extends from the base of Mount San Bernardino to the Gulf of California, and is bounded on the north by a range of rocky ridges reaching from San Bernardino to the junction of the Gila with the Colorado; on the south and west it is bounded by the Sierra of the Peninsula; and on the east by the Colorado river and Gulf of California. The area thus inclosed is a long, nearly level plain, extending in a northwest and southeast direction, from latitude thirty-four degrees in the north, to the parallel of thirty-two degrees in the south. Its greatest length in the above direction (from the base of the Bernardino Pass to the Gulf) is one hundred and seventy miles; or, measuring from the base of the Pass to the mouth of the Gila, it is one hundred and forty miles. Its greatest width is about seventy miles, measured in a north and south direction along the Colorado river, between the head of the Gulf and the mountain north of Fort Yuma.

"This plain narrows as it extends back from the Colorado river, and opposite Carriso creek its width is reduced to between sixty and seventy miles, and still further westward, near its extremity, at the San Bernardino Pass, it will not average over twenty-five miles.

"These measurements are approximate, and give for the whole area about six thousand square miles."

\* \* \* \* \*

"On the part of the desert that is usually traversed by the emigration to California, *via* the valley of the Gila, the main dependence for water is upon 'New river' and its sloughs. The two ponds called the 'great and the little lagoon' may be regarded as portions of this New river, from which they become filled only when the waters in the Colorado river rise to a great height. \* \* \* \*

"Several other wells or deep holes in the clay have been excavated at points along the road, but they are now filled up by the caving in of the banks, or by sand, so that they are useless."

Respectfully, sir, your obedient servant,

J. J. ABERT,  
*Colonel Corps Engineers.*

Hon. JOHN B. FLOYD,  
*Secretary of War.*

The Commissioner of the General Land Office, in a letter addressed to the Secretary of the Interior, says:

GENERAL LAND OFFICE, *March 16, 1860.*

SIR: I have the honor to return herewith the communication from the Hon. R. W. Johnson of the 27th ultimo, submitting resolutions of the legislature of California and a bill based thereon, and other papers, asking Congress to donate to the State a tract of country in

the southeastern part thereof, to aid in the improvement of the same, and pursuant to your reference respectfully submit—

That the bill contemplates a grant to the State of all that portion thereof south of the San Bernardino base line and east of the main range of mountains, embracing an estimated area of about *six and a half millions* of acres, of which upwards of *three and a half millions* have been surveyed and reported to this office at a cost to the general government of upwards of \$170,000.

The field notes of the survey show the land, in many places in the valleys, to be of good quality, with great want of water and timber, but generally to be third-rate and sandy, interspersed with dry beds of salt lakes, rugged and broken near the mountains, with no timber or water. We have nothing bearing upon the unsurveyed part of the tract, or the mountains thereon.

Looking to our limited knowledge of this region of the State, our want of information in regard to the extent of the mineral wealth of its mountains, and considering the great extent of the grant, and the large outlay already made by the United States for the survey of the same, I can find no ground which would warrant me in recommending a transfer, as a pure gratuity, of the proprietary interest of the United States.

Very respectfully, your obedient servant,

JOS. S. WILSON,  
*Commissioner.*

Hon. JACOB THOMPSON,  
*Secretary of the Interior.*

The foregoing testimony, in the opinion of the committee, abundantly establishes the following facts, viz:

First. That a large district of country, situated between the Colorado river and the San Bernardino mountains, is almost a perfect desert, being nearly destitute of water and vegetation through its entire extent.

Second. That it stretches from impassable mountain barriers on the north, far beyond the southern boundary of the United States, directly across what would otherwise be the line of travel from Fort Yuma to the San Geronio Pass, compelling emigrants, travelers, mail carriers, and army contractors to deflect far to the south, through a foreign country, when on their way to the Pacific States and intermediate points.

Third. That this desert plain is below the bed of the Colorado river, from which it could probably be irrigated at a trifling cost, certainly to its centre, and probably throughout its whole extent.

Fourth. That such irrigation would render much of this desert productive, habitable, probably heathful, and would certainly convert what is now an almost impassable barrier—fitly styled the “desert of death”—into an easy and comparatively pleasant highway for the transportation of your mails and government supplies, and for emigration.

Your committee, therefore, recommend the adoption of the accom-

panying joint resolution, authorizing the Secretary of War to cause an examination to be made by a competent engineer, of the practicality of supplying water on this desert from the Colorado river, on a direct line from Fort Yuma to the San Geronio Pass, and its probable cost.